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Approved for use through 10/31/2002. OMB 0651-0035

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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**DECLARATION FOR UTILITY OR  
DESIGN  
PATENT APPLICATION  
(37 CFR 1.63)**

Declaration Submitted with Initial Filing       Declaration Submitted after initial Filing (surcharge (37 CFR 1.16(e)) required)  
OR

Attorney Docket Number	BP2919
First Named Inventor	Stephen Palm
<b>COMPLETE IF KNOWN</b>	
Application Number	
Filing Date	
Group Art Unit	
Examiner Name	

**As a below named inventor, I hereby declare that:**

My residence, mailing address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**LOW POWER PROTOCOL FOR WIRELESS TERMINAL PEER-TO-PEER COMMUNICATIONS**

the specification of which

*(Title of the Invention)*

is attached hereto

OR

was filed on (MM/DD/YYYY)

as United States Application Number or PCT International

Application Number

and was amended on (MM/DD/YYYY)

(if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checkign the box, any foreign application for patent or inventor's certificate, or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Applications Numbers(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached? YES	Certified Copy Attached? NO
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

I hereby claim the benefit under 35 U.S.C. 119 (e), 120, or 365 (c) of any U.S. or PCT application(s) listed below.

Application Numbers(s)	Filing Date (MM/DD/YYYY)	Additional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.
60/466,377 <hr/> <hr/> <hr/>	4/29/2003 <hr/> <hr/> <hr/>	<input type="checkbox"/>

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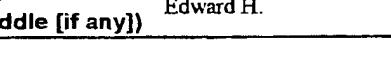
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## DECLARATION - Utility or Design Patent Application

Direct all correspondence to:		<input checked="" type="checkbox"/> Customer Number or Bar Code Label	34,399	OR <input type="checkbox"/> Correspondence address below
<b>Name</b> Bruce E. Garlick				
<b>Address</b> P.O. Box 160727				
<b>Address</b>				
<b>City</b> Austin			<b>State</b> TX	<b>ZIP</b> 78716-0727
<b>Country</b> USA		<b>Telephone</b> 512-264-8816		<b>FAX</b> 512-264-3735
<small>I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.</small>				
<b>NAME OF SOLE OR FIRST INVENTOR:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor		
<b>Given Name</b> Stephen <small>(first and middle [if any])</small>			<b>Family Name</b> Palm <small>or Surname</small>	
<b>Inventor's Signature</b> 			<b>Date</b> 3 Feb 2004	
<b>Residence: City</b> Irvine		<b>State</b> CA	<b>Country</b> USA	<b>Citizenship</b> USA
<b>Mailing Address</b> 6 Santa Luzia Aisle				
<b>Mailing Address</b>				
<b>City</b> Irvine		<b>State</b> CA	<b>ZIP</b> 92606	<b>Country</b> USA
<b>NAME OF SECOND INVENTOR:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor		
<b>Given Name</b> Edward H. <small>(first and middle [if any])</small>			<b>Family Name</b> Frank <small>or Surname</small>	
<b>Inventor's Signature</b> 			<b>Date</b>	
<b>Residence: City</b> Atherton		<b>State</b> CA	<b>Country</b> USA	<b>Citizenship</b> USA
<b>Mailing Address</b> 83 Tuscaloosa Ave.				
<b>Mailing Address</b>				
<b>City</b> Atherton		<b>State</b> CA	<b>ZIP</b> 94027	<b>Country</b> USA
<input type="checkbox"/> Additional inventors are being named on the _____ supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto.				

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## DECLARATION - Utility or Design Patent Application

Direct all correspondence to:		<input checked="" type="checkbox"/> Customer Number or Bar Code Label	34,399	OR <input type="checkbox"/> Correspondence address below
Name      Bruce E. Garlick				
Address    P.O. Box 160727				
Address				
City      Austin		State      TX	ZIP      78716-0727	
Country    USA		Telephone 512-264-8816		FAX 512-264-3735
<p>I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.</p>				
NAME OF SOLE OR FIRST INVENTOR:		<input type="checkbox"/> A petition has been filed for this unsigned inventor		
Given Name (first and middle [if any])		Stephen	Family Name or Surname	Palm
Inventor's Signature		Date		
Residence: City    Irvine		State    CA	Country    USA	Citizenship    USA
Mailing Address    6 Santa Luzia Aisle				
Mailing Address				
City    Irvine		State    CA	ZIP    92606	Country    USA
NAME OF SECOND INVENTOR:		<input type="checkbox"/> A petition has been filed for this unsigned inventor		
Given Name (first and middle [if any])		Edward H.	Family Name or Surname	Frank
Inventor's Signature		Date 2/2/04		
Residence: City    Atherton		State    CA	Country    USA	Citizenship    USA
Mailing Address    83 Tuscaloosa Ave.				
Mailing Address				
City    Atherton		State    CA	ZIP    94027	Country    USA
<input type="checkbox"/> Additional inventors are being named on the _____ supplemental Additional Inventor(s) sheets(s) PTO/SB/02A attached hereto.				

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NAME OF THIRD INVENTOR:		<input type="checkbox"/> A petition has been filed for this unsigned inventor		
Given Name (first and middle [if any]) Bruce E.		Family Name or Surname Edwards		
Inventor's Signature <i>Bruce E. Edwards</i>		Date 1/28/2004		
Residence: City Belmont	State MA	Country USA	Citizenship USA	
Mailing Address 41 Clairemont Road				
Mailing Address				
City Belmont	State MA	ZIP 02478	Country USA	
NAME OF FOURTH INVENTOR:		<input type="checkbox"/> A petition has been filed for this unsigned inventor		
Given Name (first and middle [if any]) Jason A.		Family Name or Surname Trachewsky		
Inventor's Signature		Date		
Residence: City Menlo Park	State CA	Country USA	Citizenship USA	
Mailing Address 127 Hillside Avenue				
Mailing Address				
City Menlo Park	State CA	ZIP 94025	Country USA	
NAME OF FIFTH INVENTOR:		<input type="checkbox"/> A petition has been filed for this unsigned inventor		
Given Name (first and middle [if any])		Family Name or Surname		
Inventor's Signature		Date		
Residence: City	State	Country	Citizenship	
Mailing Address				
Mailing Address				
City	State	ZIP	Country	

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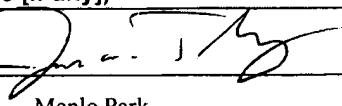
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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>NAME OF THIRD INVENTOR:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor		
Given Name (first and middle [if any]) Bruce E.		Family Name or Surname Edwards		
Inventor's Signature		Date		
Residence: City Belmont	State MA	Country USA	Citizenship USA	
Mailing Address 41 Clairemont Road				
Mailing Address				
City Belmont	State MA	ZIP 02478	Country USA	
<b>NAME OF FOURTH INVENTOR:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor		
Given Name (first and middle [if any]) Jason A.		Family Name or Surname Trachewsky		
Inventor's Signature 		Date 2/2/04		
Residence: City Menlo Park	State CA	Country USA	Citizenship USA	
Mailing Address 127 Hillside Avenue				
Mailing Address				
City Menlo Park	State CA	ZIP 94025	Country USA	
<b>NAME OF FIFTH INVENTOR:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor		
Given Name (first and middle [if any])		Family Name or Surname		
Inventor's Signature		Date		
Residence: City	State	Country	Citizenship	
Mailing Address				
Mailing Address				
City	State	ZIP	Country	

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**Certificate Under 37 C.F.R. § 3.73(b)**

**Applicants:** **Stephen Palm** **Edward H. Frank** **Bruce E. Edwards** **Jason A. Trachewsky**

Application No.: Unknown Filing Date: 2-4, 2004

## Entitled: **LOW POWER PROTOCOL FOR WIRELESS TERMINAL PEER-TO-PEER COMMUNICATIONS**

**Broadcom Corporation**  
(Name of Assignee)

**a, California Corporation**  
(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1.  the assignee of the entire right, title, and interest, or
2.  an assignee of an undivided part interest

in the patent application/patent identified above by virtue of either:

A. [X] An Assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_\_\_, Frame \_\_\_\_, or for which a copy thereof is attached.

OR

B. [ ] A chain of title from the inventor(s) of the patent application/patent identified above to the current assignee, as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

Additional documents in the chain of title are listed on a supplemental sheet.

Copies of assignments or other documents in the chain of title are attached.

**[NOTE:** A separate copy (*i.e.*, the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the PTO. See MPEP 302-302.8]

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

Date: 2/4/07

Name: **Dee Henderson**  
Major: **Business**

Manager, Intellectual Property Portfolio

Title: \_\_\_\_\_

**Signature:** 

**ASSIGNMENT**

**WHEREAS**, the undersigned inventors, hereinafter called the "Assignors", have invented a new and useful invention entitled:

**LOW POWER PROTOCOL FOR WIRELESS TERMINAL PEER-TO-PEER COMMUNICATIONS**

for which reference a full description is here made in an application for Letters Patent of the United States filed herewith.

**WHEREAS, Broadcom Corporation**, a USA company having a principal office and place of business at, 16215 Alton Parkway Irvine California 92618-7013 hereinafter called the "Assignee", is desirous of acquiring the entire right, title and interest in and to said invention, the application above identified, and in, to and under Letters Patent which may be obtained for said invention, as hereinafter more fully set forth;

**NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN**, be it known that for valuable legally sufficient consideration, the receipt of which by the Assignors from the Assignee is hereby acknowledged, the Assignors have sold, assigned and transferred, and by these presents do sell, assign and transfer unto the Assignee, its successors and assigns, the entire right, title and interest in and to the invention and the application herein above identified, and all Letters Patents that may issue for the said invention, and all division, reissues, substitutions, continuations, and extensions thereof, to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns to the full end of the term for which any and all of said Letters Patents for the said invention may issue.

**FURTHER**, be it known that the Assignors have sold, assigned and transferred, and by these presents do sell, assign and transfer unto the Assignee, its successors and assigns, the entire foreign rights to the invention disclosed in said application, in all countries of the world, including the right to file applications and obtain patents under the terms of the International Convention, and further agrees to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

And the Assignors do hereby covenant and agree, for themselves and their legal representatives, that they will assist the Assignee in the prosecution of the application herein identified; in the making and prosecution of any other applications for Letters Patent that the Assignee may elect to make covering the invention herein identified, as herein before set forth, including any application for reissue, application for reexamination, application for foreign patent rights, or any proceeding in the United States Patent and Trademark Office affecting the invention, investing in the Assignee exclusive title in and to all such other applications and Letters Patent; and in the prosecution of any interference which may arise involving said invention, or any application or Letters Patents herein contemplated; that they will promptly execute and deliver to the Assignee any and all additional

papers and make all lawful oaths which may be requested by the Assignee to fully carry out the terms of this assignment; and further that they will communicate to Assignee, or to its successors, assigns, and legal representatives, and facts known respecting said invention, and at the expense of the Assignee, testify in any legal proceedings, and generally do everything possible to aid the Assignee, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

And the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all Letters Patent to the Assignee in accordance with the terms of the assignment.

**IN TESTIMONY WHEREOF**, the Assignors have hereunto set their hands on the date indicated below.

Stephen Palm

date

Bruce E. Edwards

date

Edward H. Frank

date

Jason A. Trachewsky

date

date

date

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papers and make all lawful oaths which may be requested by the Assignee to fully carry out the terms of this assignment; and further that they will communicate to Assignee, or to its successors, assigns, and legal representatives, and facts known respecting said invention, and at the expense of the Assignee, testify in any legal proceedings, and generally do everything possible to aid the Assignee, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

And the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all Letters Patent to the Assignee in accordance with the terms of the assignment.

**IN TESTIMONY WHEREOF**, the Assignors have hereunto set their hands on the date indicated below.

Stephen Palm	date	Edward H. Frank	date
<u>Bruce E. Edwards</u>	1/28/2004	Jason A. Trachewsky	date
date		date	

Attorney Docket N . BP2919

**ASSIGNMENT for Patent Application**

In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to each of the undersigned inventor(s) Stephen Palm, Edward H. Frank, Bruce Edwards, and Jason Trachewsky, the undersigned inventor(s) hereby sell(s) and assign(s) to Broadcom Corporation, a California corporation having a principal place of business at 16215 Alton Parkway, Irvine, California 92618-7013 (the Assignee) his/her entire right, title and interest, including the right to sue for past infringement and to collect for all past, present and future damages:

check applicable box (es)  for the United States of America (as defined in 35 U.S.C. § 100 et seq.),  
 and throughout the world,

(a) in the invention(s) known as **LOW POWER PROTOCOL FOR WIRELESS TERMINAL PEER-TO-PEER COMMUNICATIONS** (BP2919) for which application(s) for patent in the United States of America has (have) been executed by the undersigned on 3 Feb, 2004 in any and all applications thereon, in any and all Letters Patent(s) therefor, and

(b) in any and all applications that claim the benefit of the patent application listed above in part (a), including continuing applications, reissues, extensions, renewals and reexaminations of the patent application or Letters Patent therefor listed above in part (a), to the full extent of the term or terms for which Letters Patents issue, and

(c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals and reexaminations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

The undersigned inventor(s) agree(s) to execute all papers necessary in connection with the application(s) and any continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection with such application(s) as the Assignee may deem necessary or expedient.

The undersigned inventor(s) agree(s) to execute all papers necessary in connection with any interference or patent enforcement action (judicial or otherwise) related to the application(s) or any continuing (continuation, divisional, or continuation-in-part), reissue or reexamination application(s) thereof.

**Attorney Docket No. BP2919**

The undersigned inventor(s) hereby represent(s) that he/she has full right to convey the entire interest herein assigned, and that he/she has not executed, and will not execute, any agreement in conflict therewith.

The undersigned inventor(s) hereby grant(s): Bruce E. Garlick, Registration No. 36,520, James A. Harrison, Registration No. 40,401, Timothy W. Markison, Registration No. 33,534, Shayne X. Short, Registration No. 45,105, William W. Kidd 31,772, and Robert McLauchlan 44,924; all of Garlick, Harrison & Markison, LLP, P.O. Box 160727, Austin, Texas 78716-0727, power to insert in this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, executed by the undersigned inventor(s) on the date opposite his/her name.

Stephen Palm:

Date: 3 feb 2003

Edward H. Frank:

Date:

Bruce Edwards:

Date:

Jason Trachewsky:

Date:

**POWER OF ATTORNEY FROM ASSIGNEE**

Broadcom Corporation, a California corporation having a principal place of business at 16215 Alton Parkway, Irvine, California 92618-7013, is assignee of the entire right, title and interest for the United States of America (as defined in 35 U.S.C. § 100), by reason of an Assignment to the Assignee executed on 2/3/04 2/2/04 1/28/04 2/2/04 of an invention known as **LOW POWER PROTOCOL FOR WIRELESS TERMINAL PEER-TO-PEER COMMUNICATIONS** (Attorney Docket No. BP 2919), which is disclosed and claimed in a patent application of the same title by the inventor(s) Stephen Palm, Edward H. Frank, Bruce E. Edwards and Jason A. Trachewsky (said application filed on 2-4-04) at the U.S. Patent and Trademark Office, having Application Number \_\_\_\_\_).

The Assignee hereby appoints the U.S. attorneys associated with Garlick, Harrison & Markison, LLP to prosecute this application and any continuation, divisional, continuation-in-part, or reissue application thereof, and to transact all business in the U.S. Patent and Trademark Office connected therewith, such attorneys currently being: Bruce E. Garlick, Registration No. 36,520, James A. Harrison, Registration No. 40,401, Timothy W. Markison, Registration No. 33,534, and Shayne X. Short, Registration No. 45,105. The Assignee hereby grants said attorneys the power to insert on this Power of Attorney any further identification that may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office.

Send correspondence to:

GARLICK, HARRISON & MARKISON, LLP  
P.O. Box 160727  
AUSTIN, TEXAS 78716-0727.

Direct phone calls to Bruce Garlick at (512) 264-8816.

FOR: Broadcom Corporation  
SIGNATURE: Dee Henderson  
BY: Dee Henderson  
Manager, Intellectual Property Portfolio  
TITLE: \_\_\_\_\_  
DATE: 2/4/04